DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-029609
Date Inspected: 28-May-2013

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name: Fred Michels

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG panel point PP13.5-E5 west bound, ABF welder Lou Xiao Hua was observed performing the 3F (vertical) position fillet welding of the barrier cover plate at the corner of luminaire light post box. The welder was noted fillet welding the plates using the Shielded Metal Arc Welding (SMAW) with 3.2mm diameter E7018H4R electrode implementing the Welding Procedure Specification (WPS) ABF-WPS-D15-F1200A. The fillet welding of the barrier cover on the luminaire corner was welded as per the drawing Barrier Details No. 2D. This QA Inspector noted the QC Inspector Fred Michels monitoring the welding parameters and the quality of the workmanship. This QA inspector performed a verification of the welding parameters and observed the current of 126 amperes of the low hydrogen electrodes. At the end of the shift, the welder completed the 6mm fillet weld joints on two (2) corners of the luminaire box as mentioned above.

FW Spencer:

At location various panel point along the north side of the bikepath, this QA randomly observed FW Spencer welders Barry Mullaney and Tim Esquivel performing the Complete Joint Penetration (CJP)using the Shielded Metal Arc Welding (SMAW) during welding of the root pass to cover pass of the 4” diameter compressed air and domestic water line field butt joints. The welders were noted using the 3/32” diameter electrodes during the welding of the root pass (E6010)and the cover pass (E7010H4R)implementing the FW Spencer WPS 1-12-1. The

welders were noted preheating and removing the moisture of the joint using a portable propylene gas torch prior welding. During welding, ABF QC Fred Michels was noted monitoring the welding parameters. At the end of the shift it was noted that the CJP welding on three (3) 4" diameter compressed air and one (1) 2.5" diameter were completed as noted below:

Welder Barry Mullaney:

1. 54/4/77/BE
2. 40/2.5/49/BE

Welder Tim Esquivel:

3. 44/4/61/BE
4. 47/4/61/BE

During the shift, FW Spencer welder Rick Kickvee was also observed perform 3G (vertical) position SMAW welding Partial Joint Penetration (PJP) on the 5/8" thick wing plate for the pipe support PS #130528. The welder was noted using 1/8" diameter E7018H4R electrode. During the shift, PJP welding on two sides of the pipe support was completed. ABF QC Fred Michels was noted monitoring the welder's welding parameters and workmanship of the butt joint being welded. ABF QC was also noted performing Magnetic Particle Testing (MT) on the welded butt joint as soon as they were completed.

Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Gary Thomas 916-764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Reyes,Danny	QA Reviewer